```
SSSSSSSSSSS    UUU           UUU   MMM           MMM
SSSSSSSSSSS    UUU           UUU   MMM           MMM
SSSSSSSSSSS    UUU           UUU   MMM           MMM
SSS            UUU           UUU   MMMMM       MMMMM
SSS            UUU           UUU   MMMMMM     MMMMMM
SSS            UUU           UUU   MMMMMM     MMMMMM
SSS            UUU           UUU   MMM MMM   MMM MMM
SSS            UUU           UUU   MMM  MMM MMM  MMM
SSS            UUU           UUU   MMM   MMM MM   MMM
   SSSSSSSSS   UUU           UUU   MMM           MMM
   SSSSSSSSS   UUU           UUU   MMM           MMM
   SSSSSSSSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
         SSS   UUU           UUU   MMM           MMM
SSSSSSSSSSS    UUUUUUUUUUUUUUUUU   MMM           MMM
SSSSSSSSSSS    UUUUUUUUUUUUUUUUU   MMM           MMM
SSSSSSSSSSS    UUUUUUUUUUUUUUUUU   MMM           MMM
```

FILEID**SUMSLP

```
SSSSSSSS  UU      UU  MM      MM  SSSSSSSS  LL          PPPPPPPP
SSSSSSSS  UU      UU  MM      MM  SSSSSSSS  LL          PPPPPPPP
SS        UU      UU  MMMM  MMMM            LL          PP      PP
SS        UU      UU  MMMM  MMMM  SS        LL          PP      PP
SS        UU      UU  MM MM MM MM SS        LL          PP      PP
SS        UU      UU  MM  MM  MM  SS        LL          PP      PP
SSSSSS    UU      UU  MM      MM  SSSSSS    LL          PPPPPPPP
SSSSSS    UU      UU  MM      MM  SSSSSS    LL          PPPPPPPP
      SS  UU      UU  MM      MM        SS  LL          PP
      SS  UU      UU  MM      MM        SS  LL          PP
      SS  UU      UU  MM      MM        SS  LL          PP
      SS  UU      UU  MM      MM        SS  LL          PP
SSSSSSSS  UUUUUUUUUU  MM      MM  SSSSSSSS  LLLLLLLLLL  PP          ....
SSSSSSSS  UUUUUUUUUU  MM      MM  SSSSSSSS  LLLLLLLLLL  PP          ....


MM      MM  AAAAAA      PPPPPPPP
MM      MM  AAAAAA      PPPPPPPP
MMMM  MMMM  AA      AA  PP      PP
MMMM  MMMM  AA      AA  PP      PP
MM MM MM MM  AA      AA  PP      PP
MM  MM  MM  AA      AA  PP      PP
MM      MM  AA      AA  PPPPPPPP
MM      MM  AA      AA  PPPPPPPP
MM      MM  AAAAAAAAAA  PP
MM      MM  AAAAAAAAAA  PP
MM      MM  AA      AA  PP
MM      MM  AA      AA  PP
MM      MM  AA      AA  PP
MM      MM  AA      AA  PP
```

```
                                    +-----------------------------+
                                    ! Object Module Synopsis !
                                    +-----------------------------+

Module Name      Ident           Bytes       File                                     Creation Date        Creator
-----------      -----           -----       ----                                     -------------        -------
MAIN             V04-000            62   -$255$DUA28:[SUM.OBJ]SUM.OLB;1             16-SEP-1984 02:12    VAX/VMS Macro V04-00
DATA             V04-000          1829   -$255$DUA28:[SUM.OBJ]SUM.OLB;1             16-SEP-1984 02:12    VAX/VMS Macro V04-00
GETCMD           V04-000           340   -$255$DUA28:[SUM.OBJ]SUM.OLB;1             16-SEP-1984 02:14    VAX/VMS Macro V04-00
UPDATE           V04-000           953   -$255$DUA28:[SUM.OBJ]SUM.OLB;1             16-SEP-1984 02:13    VAX/VMS Macro V04-00
CLI$INTERFACE    V04-000           516   -$255$DUA28:[SYSLIB]STARLET.OLB;2          16-Sep-1984 00:32    VAX-11 Bliss-32 V4.0-742
CLI$GLOBALS      V04-000             0   -$255$DUA28:[SYSLIB]STARLET.OLB;2          15-SEP-1984 23:38    VAX/VMS Macro V04-00
RMS$GLOBALS      V04-000             0   -$255$DUA28:[SYSLIB]STARLET.OLB;2          16-SEP-1984 01:35    VAX/VMS Macro V04-00
SYS$P1_VECTOR    V04-000             0   -$255$DUA28:[SYSLIB]STARLET.OLB;2          16-SEP-1984 00:40    VAX/VMS Macro V04-00
LIBRTL           V04-000             0   -$255$DUA28:[SYSLIB]LIBRTL.EXE;1           16-SEP-1984 04:00    VAX-11 Linker V04-00
SUMSHR           V04-000             0   _$255$DUA28:[SYSLIB]SUMSHR.EXE;1           16-SEP-1984 04:00    VAX-11 Linker V04-00
```

```
                              +-----------------------------+
                              ! Image Section Synopsis !
                              +-----------------------------+
```

Cluster	Type	Pages	Base Addr	Disk VBN	PFC	Protection and Paging	Global Sec. Name	Match	Majorid	Minorid
DEFAULT_CLUSTER	0	4	00000200	2	0	READ WRITE COPY ON REF				
	0	4	00000A00	6	0	READ ONLY				
	0	1	00001200	10	0	READ WRITE FIXUP VECTORS				
	253	20	7FFFD800	0	0	READ WRITE DEMAND ZERO				
LIBRTL	3	111	00000000-R	0	0	READ ONLY	LIBRTL_001	LESS/EQUAL	1	11
	4	1	0000DE00-R	0	0	READ WRITE DEMAND ZERO	LIBRTL_002	LESS/EQUAL	1	11
SUMSHR	3	12	00000000-R	0	0	READ ONLY	SUMSHR_001	LESS/EQUAL	1	1000
	2	1	00001800-R	0	0	READ WRITE COPY ON REF	SUMSHR_002	LESS/EQUAL	1	1000
	3	1	00001A00-R	0	0	READ ONLY	SUMSHR_003	LESS/EQUAL	1	1000

```
        Key for special characters above:
              +--------------------+
              ! R  - Relocatable !
              ! P  - Protected   !
              +--------------------+
```

```
                                    +-----------------------------+
                                    ! Program Section Synopsis !
                                    +-----------------------------+
```

Psect Name	Module Name	Base	End	Length		Align	Attributes
$RMSNAM		00000200	0000020D	0000000E (	14.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,NOEXE, RD, WRT,NOVEC
	DATA	00000200	0000020D	0000000E (	14.)	BYTE 0	
SUM$RW_DATA		00000210	00000926	00000717 (	1815.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,NOEXE, RD, WRT,NOVEC
	DATA	00000210	00000926	00000717 (	1815.)	LONG 2	
$CODE$		00000A00	00000C03	00000204 (	516.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD,NOWRT,NOVEC
	CLI$INTERFACE	00000A00	00000C03	00000204 (	516.)	LONG 2	
SUM$CODE		00000C04	00001125	00000522 (	1314.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD,NOWRT,NOVEC
	MAIN	00000C04	00000C41	0000003E (	62.)	BYTE 0	
	GETCMD	00000C42	00000D6C	0000012B (	299.)	BYTE 0	
	UPDATE	00000D6D	00001125	000003B9 (	953.)	BYTE 0	
SUM$RO_DATA		00001128	00001150	00000029 (	41.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD,NOWRT,NOVEC
	GETCMD	00001128	00001150	00000029 (	41.)	LONG 2	

```
+---------------------------+
! Symbol Cross Reference !
+---------------------------+
```

Symbol	Value	Defined By	Referenced By ...
CLI$DCL_PARSE	00000ACF-R	CLI$INTERFACE	
CLI$DISPATCH	00000B80-R	CLI$INTERFACE	
CLI$GET_VALUE	00000A43-R	CLI$INTERFACE	GETCMD
CLI$NEXT_QUAL	00000BC1-R	CLI$INTERFACE	
CLI$PRESENT	00000A00-R	CLI$INTERFACE	GETCMD
CLI$_ABSENT	000381F0	CLI$GLOBALS	CLI$INTERFACE
CLI$_COMMA	0003FD39	CLI$GLOBALS	CLI$INTERFACE
CLI$_CONCAT	0003FD29	CLI$GLOBALS	CLI$INTERFACE
CLI$_DEFAULTED	0003FD21	CLI$GLOBALS	CLI$INTERFACE
CLI$_LOCNEG	00038230	CLI$GLOBALS	CLI$INTERFACE
CLI$_LOCPRES	0003FD31	CLI$GLOBALS	CLI$INTERFACE
CLI$_NEGATED	000381F8	CLI$GLOBALS	CLI$INTERFACE GETCMD
CLI$_NOCOMD	000380B0	CLI$GLOBALS	CLI$INTERFACE
CLI$_PRESENT	0003FD19	CLI$GLOBALS	CLI$INTERFACE
LIB$FREE_VM	00001250-RX	LIBRTL	CLI$INTERFACE
LIB$GET_VM	0000125C-RX	LIBRTL	CLI$INTERFACE GETCMD
LIB$LP_LINES	00001258-RX	LIBRTL	UPDATE
RAB$L_RHB	0000002C	RMS$GLOBALS	GETCMD
RMS$_EOF	0001827A	RMS$GLOBALS	UPDATE
STR$ANALYZE_SDESC	0000124C-RX	LIBRTL	CLI$INTERFACE
STR$COPY_DX	00001248-RX	LIBRTL	CLI$INTERFACE
STR$FREE1_DX	00001254-RX	LIBRTL	GETCMD
SUM$AQ_MSGDES	000007C8-R	DATA	UPDATE
SUM$AT_AUDIT	00000220-R	DATA	UPDATE
SUM$AT_BUFFER	00000238-R	DATA	UPDATE
SUM$AT_INPUTFN	00000358-R	DATA	UPDATE
SUM$AT_LINENE	00000237-R	DATA	UPDATE
SUM$AT_LINENO	00000231-R	DATA	UPDATE
SUM$AT_LISTFN	000003D8-R	DATA	
SUM$AT_MSGBUF	000007D4-R	DATA	UPDATE
SUM$AT_OUTPUFN	00000398-R	DATA	
SUM$AT_SBTTL	000008A6-R	DATA	UPDATE
SUM$AT_SBTTLDT	000008E2-R	DATA	
SUM$AT_SBTTLFS	000008FA-R	DATA	UPDATE
SUM$AT_TITLE	0000081C-R	DATA	UPDATE
SUM$AT_TITLEDT	00000859-R	DATA	
SUM$AT_TITLEPN	0000089E-R	DATA	UPDATE
SUM$AW_MSGLEN	000007D0-R	DATA	UPDATE
SUM$AX_CBL	00000337-R	DATA	UPDATE
SUM$AX_INPUTFAB	0000042C-R	DATA	GETCMD UPDATE
SUM$AX_INPUTNAM	000004A8-R	DATA	UPDATE
SUM$AX_INPUTRAB	00000508-R	DATA	UPDATE
SUM$AX_INPUTXAB	0000047C-R	DATA	UPDATE
SUM$AX_LISTFAB	00000640-R	DATA	GETCMD UPDATE
SUM$AX_LISTNAM	00000690-R	DATA	
SUM$AX_LISTRAB	000006F0-R	DATA	UPDATE
SUM$AX_OUTPUFAB	0000054C-R	DATA	GETCMD UPDATE
SUM$AX_OUTPUNAM	0000059C-R	DATA	
SUM$AX_OUTPURAB	000005FC-R	DATA	GETCMD UPDATE

Symbol	Value	Defined By	Referenced By ...	
SUM$AX_RHB	00000418-R	DATA	GETCMD	UPDATE
SUM$AX_TERMFAB	00000734-R	DATA	MAIN	
SUM$AX_TERMRAB	00000784-R	DATA	MAIN	UPDATE
SUM$CLOSE	00001278-RX	SUMSHR	UPDATE	
SUM$GETCMD	00000C42-R	GETCMD	MAIN	
SUM$GL_CLIADDR	00000210-R	DATA	MAIN	
SUM$GL_FLAGS	0000021C-R	DATA	GETCMD	UPDATE
SUM$GL_UPDATES	00000354-R	DATA	GETCMD	UPDATE
SUM$GQ_CMDLINE	00000214-R	DATA		
SUM$GQ_SBTTLDS	0000089E-R	DATA	UPDATE	
SUM$GQ_TITLEDS	00000814-R	DATA	UPDATE	
SUM$GW_LINENO	00000428-R	DATA	UPDATE	
SUM$GW_PAGENO	00000424-R	DATA	UPDATE	
SUM$GW_PAGESZ	00000426-R	DATA	UPDATE	
SUM$INIT_EDIT	00001270-RX	SUMSHR	UPDATE	
SUM$K_SBTTLLN	00000081	DATA	UPDATE	
SUM$K_TITLELN	00000082	DATA	UPDATE	
SUM$LINE	00001274-RX	SUMSHR	UPDATE	
SUM$OPEN	0000126C-RX	SUMSHR	UPDATE	
SUM$OPEN_ERR	0000127C-RX	SUMSHR	MAIN	UPDATE
SUM$START	00000C04-R	MAIN		
SUM$UPDATE	00000D6D-R	UPDATE	MAIN	
SUM$UPDATE_QUAL	00001268-RX	SUMSHR	GETCMD	
SUM$WRITE_ERR	00001280-RX	SUMSHR	UPDATE	
SYS$ASCTIM	7FFEDE48	SYS$P1_VECTOR	UPDATE	
SYS$CLI	7FFEDE18	SYS$P1_VECTOR	CLI$INTERFACE	
SYS$CLOSE	7FFEE1B8	SYS$P1_VECTOR	UPDATE	
SYS$CONNECT	7FFEE1C0	SYS$P1_VECTOR	MAIN	UPDATE
SYS$CREATE	7FFEE1C8	SYS$P1_VECTOR	UPDATE	
SYS$GETMSG	7FFEE0B0	SYS$P1_VECTOR	UPDATE	
SYS$OPEN	7FFEE208	SYS$P1_VECTOR	MAIN	UPDATE
SYS$PUT	7FFEE188	SYS$P1_VECTOR	UPDATE	
XAB$Q_CDT	00000014	RMS$GLOBALS	UPDATE	

```
                                        +--------------------+
                                        ! Symbols By Value !
                                        +--------------------+


Value                                   Symbols...
-----                                   ----------
00000014        XAB$Q_CDT
0000002C        RAB$L_RHB
00000081        SUM$K_SBTTLLN
00000082        SUM$K_TITLELN
00000210        R-SUM$GL_CLIADDR
00000214        R-SUM$GQ_CMDLINE
0000021C        R-SUM$GL_FLAGS
00000220        R-SUM$AT_AUDIT
00000231        R-SUM$AT_LINENO
00000237        R-SUM$AT_LINENE
00000238        R-SUM$AT_BUFFER
00000337        R-SUM$AX_CBL
00000354        R-SUM$GL_UPDATES
00000358        R-SUM$AT_INPUTFN
00000398        R-SUM$AT_OUTPUFN
000003D8        R-SUM$AT_LISTFN
00000418        R-SUM$AX_RHB
00000424        R-SUM$GW_PAGENO
00000426        R-SUM$GW_PAGESZ
00000428        R-SUM$GW_LINENO
0000042C        R-SUM$AX_INPUTFAB
0000047C        R-SUM$AX_INPUTXAB
000004A8        R-SUM$AX_INPUTNAM
00000508        R-SUM$AX_INPUTRAB
0000054C        R-SUM$AX_OUTPUFAB
0000059C        R-SUM$AX_OUTPUNAM
000005FC        R-SUM$AX_OUTPURAB
00000640        R-SUM$AX_LISTFAB
00000690        R-SUM$AX_LISTNAM
000006F0        R-SUM$AX_LISTRAB
00000734        R-SUM$AX_TERMFAB
00000784        R-SUM$AX_TERMRAB
000007C8        R-SUM$AQ_MSGDES
000007D0        R-SUM$AW_MSGLEN
000007D4        R-SUM$AT_MSGBUF
00000814        R-SUM$GQ_TITLEDS
0000081C        R-SUM$AT_TITLE
00000859        R-SUM$AT_TITLEDT
0000089E        R-SUM$AT_TITLEPN        R-SUM$GQ_SBTTLDS
000008A6        R-SUM$AT_SBTTL
000008E2        R-SUM$AT_SBTTLDT
000008FA        R-SUM$AT_SBTTLFS
00000A00        R-CLI$PRESENT
00000A43        R-CLI$GET_VALUE
00000ACF        R-CLI$DCL_PARSE
00000B80        R-CLI$DISPATCH
00000BC1        R-CLI$NEXT_QUAL
00000C04        R-SUM$START
00000C42        R-SUM$GETCMD
```

Value   Symbols...
-----   ----------
00000D6D   R-SUM$UPDATE
00001248   RX-STR$COPY_DX
0000124C   RX-STR$ANALYZE_SDESC
00001250   RX-LIB$FREE_VM
00001254   RX-STR$FREET_DX
00001258   RX-LIB$LP_LINES
0000125C   RX-LIB$GET_VM
00001268   RX-SUM$UPDATE_QUAL
0000126C   RX-SUM$OPEN
00001270   RX-SUM$INIT_EDIT
00001274   RX-SUM$LINE
00001278   RX-SUM$CLOSE
0000127C   RX-SUM$OPEN_ERR
00001280   RX-SUM$WRITE_ERR
0001827A   RMS$_EOF
000380B0   CLI$_NOCOMD
000381F0   CLI$_ABSENT
000381F8   CLI$_NEGATED
00038230   CLI$_LOCNEG
0003FD19   CLI$_PRESENT
0003FD21   CLI$_DEFAULTED
0003FD29   CLI$_CONCAT
0003FD31   CLI$_LOCPRES
0003FD39   CLI$_COMMA
7FFEDE18   SYS$CLI
7FFEDE48   SYS$ASCTIM
7FFEE0B0   SYS$GETMSG
7FFEE188   SYS$PUT
7FFEE1B8   SYS$CLOSE
7FFEE1C0   SYS$CONNECT
7FFEE1C8   SYS$CREATE
7FFEE208   SYS$OPEN

        Key for special characters above:
            +--------------------+
            | * - Undefined |
            | U - Universal |
            | R - Relocatable |
            | X - External |
            +--------------------+

```
                                       +------------------+
                                       ! Image Synopsis !
                                       +------------------+

Virtual memory allocated:              00000200 000013FF 00001200 (4608. bytes, 9. pages)
Stack size:                                   20. pages
Image header virtual block limits:             1.              1. (      1. block)
Image binary virtual block limits:             2.             10. (      9. blocks)
Image name and identification:         SUMSLP V04-000
Number of files:                               6.
Number of modules:                            10.
Number of program sections:                   10.
Number of global symbols:                    328.
Number of cross references:                  166.
Number of image sections:                      9.
User transfer address:                 00000C04
Number of code references to shareable images:  13.
Image type:                            EXECUTABLE.
Map format:                            FULL WITH CROSS REFERENCE in file _$255$DUA28:[SUM.LIS]SUMSLP.MAP;1
Estimated map length:                         77. blocks
                                       +----------------------+
                                       ! Link Run Statistics !
                                       +----------------------+

Performance Indicators                 Page Faults   CPU Time        Elapsed Time
---------------------                  -----------   --------        ------------
    Command processing:                        129   00:00:00.32     00:00:01.12
    Pass 1:                                    143   00:00:01.69     00:00:13.70
    Allocation/Relocation:                      37   00:00:00.16     00:00:01.20
    Pass 2:                                     39   00:00:00.76     00:00:04.37
    Map data after object module synopsis:      25   00:00:00.64     00:00:00.73
    Symbol table output:                         1   00:00:00.03     00:00:00.87
Total run values:                              374   00:00:03.60     00:00:21.99
```

Using a working set limited to 1200 pages and 77 pages of data storage (excluding image)

Total number object records read (both passes):   391
    of which 183 were in libraries and 8 were DEBUG data records containing 228 bytes

Number of modules extracted explicitly   = 4
    with 4 extracted to resolve undefined symbols

23 library searches were for symbols not in the library searched

A total of 0 global symbol table records was written

```
LINK/USERLIB=PROC/EXE=EXE$:SUMSLP/MAP=MAP$:SUMSLP/FULL/CROSS/NOTRACE SYS$INPUT/OPTIONS
LIB$:SUM/INCLUDE=(MAIN,DATA,GETCMD,UPDATE)
PSECT=SUM$RO_DATA,EXE
PSECT=$RMSNAM,NOEXE
```